CLAIMS

I claim:

1. A data transfer method comprising steps of

(a)examining a TV video signal, comprising electromagnetic (EM) waves distributed over time, for finding a time slot with a suitable EM wave transient rate;

(b) generating a data-carrying TV signal by inserting into said TV signal a hidden-from-viewer data signal in said time slot having said suitable EM waves transient rate; and

(c) transmitting said data-carrying TV signal to a TV and a data receiver.

2. The data transfer method of claim 1 wherein:

said step (b) of generating a data-carrying TV signal by inserting into said TV signal a hidden-from-viewer data signal comprising a step of inserting a frequency-modulated (FM) data signal into said time slot having said suitable EM wave transient rate.

3. The data transfer method of claim 1 wherein:

said step (b) of generating a data-carrying TV signal by inserting into said TV signal a hidden-from-viewer data signal comprising a step of inserting multiple frequency-modulated (MF) data signals into said time slot having said suitable EM wave transient rate.

4. The data transfer method of claim 1 wherein:

said step (b) of generating a data-carrying TV signal by inserting into said TV signal a hidden-from-viewer data signal comprising a step of inserting a phase-modulated (PM) data signal into said time slot having said suitable EM wave transient rate.

5. The data transfer method of claim 1 wherein:

said step (b) of generating a data-carrying TV signal by inserting into said TV signal a hidden-from-viewer data signal comprising a step of inserting a multiple-phase-modulated (MP) data signal into said time slot having said suitable EM wave transient rate.

6. The data transfer method of claim 1 wherein:

said step (b) of generating a data-carrying TV signal by inserting into said TV signal a hidden-from-viewer data signal comprising a step of inserting a modulated data signal with a compensated format (CF) into said time slot having said suitable EM wave transient rate.

7. The data transfer method of claim 1 wherein:

said step (b) of generating a data-carrying TV signal by inserting into said TV signal a hidden-from-viewer data signal comprising a step of inserting a compensated-amplitude (CA) modulated data signal into said time slot having said suitable EM wave transient rate.

8. The data transfer method of claim 1 wherein:

said step (b) of generating a data-carrying TV signal by inserting into said TV signal a hidden-from-viewer data signal comprising a step of inserting a differential amplitude (DA) modulated data signal into said time slot having said suitable EM wave transient rate.

9. The data transfer method of claim 1 wherein:

said step (b) of generating a data-carrying TV signal by inserting into said TV signal a hidden-from-viewer data signal comprising a step of inserting said data signal into said time slot employed for black level data transfer (BLDT).

10. The data transfer method of claim 9 wherein:

said step of inserting said data signal into said time slots employed for black level data transfer (BLDT) comprising a step of inserting a frequency-modulated (FM) data signal into said time slot employed for BLDT.

11. The data transfer method of claim 9 wherein:

said step of inserting said data signal into said time slots employed for black level data transfer (BLDT) comprising a step of inserting a multiple-frequency-modulated (MF) data signal into said time slot employed for BLDT.

12. The data transfer method of claim 9 wherein:

said step of inserting said data signal into said time slots employed for black level data transfer (BLDT) comprising a step of inserting a phase-modulated (PF) data signal into said time slot employed for BLDT.

13. The data transfer method of claim 9 wherein:

said step of inserting said data signal into said time slots employed for black level data transfer (BLDT) comprising a step of inserting a multiple-phase-modulated (MP) data signal into said time slot employed for BLDT.

14. The data transfer method of claim 9 wherein:

said step of inserting said data signal into said time slots employed for black level data transfer (BLDT) comprising a step of inserting a modulated signal with compensated-format (CF) as data signal into said time slot employed for BLDT.

15. The data transfer method of claim 9 wherein:

said step of inserting said data signal into said time slots employed for black level data transfer (BLDT) comprising a step of inserting a compensated amplitude (CA) modulated data signal into said time slot employed for BLDT.

16. The data transfer method of claim 9 wherein:

said step of inserting said data signal into said time slots employed for black level data transfer (BLDT) comprising a step of inserting a differential amplitude (DA)-modulated data signal into said time slot employed for BLDT.

17. The data transfer method of claim 1 wherein:

said step (b) of generating a data-carrying TV signal by inserting into said TV signal a hidden-from-viewer data signal comprising a step of inserting said data signal into said time slot employed for white level data transfer (WLDT).

18. The data transfer method of claim 17 wherein:

said step of inserting said data signal into said time slots employed for white level data transfer (WLDT) comprising a step of inserting a frequency-modulated (FM) data signal into said time slot employed for WLDT.

19. The data transfer method of claim 17 wherein:

said step of inserting said data signal into said time slots employed for white level data transfer (WLDT) comprising a step of inserting a multiple-frequency-modulated (MF) data signal into said time slot employed for WLDT.

20. The data transfer method of claim 17 wherein:

said step of inserting said data signal into said time slots employed for white level data transfer (WLDT) comprising a step of inserting a phase-modulated (PF) data signal into said time slot employed for WLDT.

21. The data transfer method of claim 17 wherein:

said step of inserting said data signal into said time slots employed for white level data transfer (WLDT) comprising a step of inserting a multiple-phase-modulated (MP) data signal into said time slot employed for WLDT.

22. The data transfer method of claim 17 wherein:

said step of inserting said data signal into said time slots employed for white level data transfer (WLDT) comprising a step of inserting a modulated signal with compensated-format (CF) as data signal into said time slot employed for WLDT.

23. The data transfer method of claim 17 wherein:

said step of inserting said data signal into said time slots employed for white level data transfer (WLDT) comprising a step of inserting a compensated amplitude (CA) modulated data signal into said time slot employed for WLDT.

24. The data transfer method of claim 17 wherein:

said step of inserting said data signal into said time slots employed for white level data transfer (WLDT) comprising a step of inserting a differential amplitude (DA)-modulated data signal into said time slot employed for WLDT.

25. The data transfer method of claim 1 wherein:

said step (b) of generating a data-carrying TV signal by inserting into said TV signal a hidden-from-viewer data signal comprising a step of inserting said data signal into said time slot employed for blank level data transfer (KLDT).

26. The data transfer method of claim 25 wherein:

said step of inserting said data signal into said time slots employed for blank level data transfer (KLDT) comprising a step of inserting a frequency-modulated (FM) data signal into said time slot employed for KLDT.

26. The data transfer method of claim 25 wherein:

said step of inserting said data signal into said time slots employed for blank level data transfer (KLDT) comprising a step of inserting a multiple-frequency-modulated (MF) data signal into said time slot employed for KLDT.

27. The data transfer method of claim 25 wherein:

said step of inserting said data signal into said time slots employed for blank level data transfer (KLDT) comprising a step of inserting a phase-modulated (PF) data signal into said time slot employed for KLDT.

28. The data transfer method of claim 25 wherein:

said step of inserting said data signal into said time slots employed for blank level data transfer (KLDT) comprising a step of inserting a multiple-phase-modulated (MP) data signal into said time slot employed for KLDT.

29. The data transfer method of claim 25 wherein:

said step of inserting said data signal into said time slots employed for blank level data transfer (KLDT) comprising a step of inserting a modulated signal with compensated-format (CF) as data signal into said time slot employed for KLDT.

30. The data transfer method of claim 25 wherein:

said step of inserting said data signal into said time slots employed for blank level data transfer (KLDT) comprising a step of inserting a compensated amplitude (CA) modulated data signal into said time slot employed for KLDT.

31. The data transfer method of claim 25 wherein:

said step of inserting said data signal into said time slots employed for blank level data transfer (KLDT) comprising a step of inserting a differential amplitude (DA)-modulated data signal into said time slot employed for KLDT.

32. The data transfer method of claim 1 wherein:

said step (c) of transmitting said data-carrying TV signal to a TV and a data receiver further comprising a step of storing a data transmitted by said data-carrying TV signal in a user-accessible data-storage in said data receiver.

33. A data transfer method comprising steps of

(a) rearranging said TV signal into a non-viewer-interfering data-carrying TV signal; and

(b) transmitting said data-carrying TV signal to a TV and a data receiver.

34. The data transfer method of claim 33 wherein:

said step (a) of rearranging said TV signal into said non-viewer-interfering data-carrying TV signal comprising a step of arranging said TV signal according to a color table data transfer (CTDT) method by best fitting a TV pixel signal to a color in one of at least two color tables for representing a binary level of a data according to a color table employed for encoding said binary level of said data into said TV pixel signal.

35. The data transfer method of claim 33 wherein:

said step (a) of rearranging said TV signal into said non-viewer-interfering data-carrying TV signal comprising a step of arranging said TV signal according to a predefined object data transfer (PODT) method by prearranging a TV pixel signal for showing a designated object and employing said TV pixel signal for transmitting a data signal.

36. The data transfer method of claim 33 wherein:

said step (a) of rearranging said TV signal into said non-viewer-interfering data-carrying TV signal comprising a step of arranging said TV signal according to a small object data transfer (SODT) method by detecting a TV pixel signal for showing a small object and employing said TV pixel signal for transmitting a data signal.

37. The data transfer method of claim 33 wherein:

said step (a) of rearranging said TV signal into said non-viewer-interfering data-carrying TV signal comprising a step of arranging said TV signal according to a dedicated object data transfer (DODT) method by designating a TV pixel signal for showing a dedicated object and employing said TV pixel signal for transmitting a data signal.

38. The data transfer method of claim 33 wherein:

said step (a) of rearranging said TV signal into said non-viewer-interfering data-carrying TV signal comprising a step of arranging said TV signal according to an invisible frame data transfer (IFDT) method by determining a TV pixel signal in an invisible frame and employing said TV pixel signal for transmitting a data signal.

39. The data transfer method of claim 38 wherein:

said step (a) of employing said TV pixel signal in said invisible frame for transmitting a data signal comprising a step of transmitting a frequency-modulated (FM) data signal.

40. The data transfer method of claim 38 wherein:

said step (a) of employing said TV pixel signal in said invisible frame for transmitting a data signal comprising a step of transmitting a multiple frequency-modulated (MF) data signal.

41. The data transfer method of claim 38 wherein:

said step (a) of employing said TV pixel signal in said invisible frame for transmitting a data signal comprising a step of transmitting a phase-modulated (PM) data signal.

42. The data transfer method of claim 38 wherein:

said step (a) of employing said TV pixel signal in said invisible frame for transmitting a data signal comprising a step of transmitting a multiple-phase-modulated (MP) data signal.

43. The data transfer method of claim 38 wherein:

said step (a) of employing said TV pixel signal in said invisible frame for transmitting a data signal comprising a step of transmitting a modulated data signal with a compensated format (CF).

44. The data transfer method of claim 38 wherein:

said step (a) of employing said TV pixel signal in said invisible frame for transmitting a data signal comprising a step of transmitting a compensated-amplitude (CA) modulated data signal.

45. The data transfer method of claim 38 wherein:

said step (a) of employing said TV pixel signal in said invisible frame for transmitting a data signal comprising a step of transmitting a differential amplitude (DA) modulated data signal.

46. A video game system comprising:

a TV signal interface/decoding means for receiving a TV signal encoded with a video-game data-signal therein for decoding and employing said data signal.

47. The video game system of claim 46 wherein:

said TV signal interface/decoding means comprising a TV interface means for receiving said TV signal encoded with said data-signal from a TV.

48. The video game system of claim 46 further comprising:

a video game controller for allowing a video game player to control and play a video game on said video game system.

49. A stock price update system comprising:

a TV signal interface/decoding means for receiving a TV signal encoded with a data-signal comprising stock price data.